

# Cell cycle

10/26/16

During the cell cycle, a cell grows, prepares for division, and divides to form two daughter cells.

## INTERPHASE:

G<sub>1</sub> phase: Cell growth

In this phase, cells increase in size and synthesize new proteins and organelles.

S phase: DNA replication

In the S (synthesis) phase, new DNA is synthesized when the chromosomes are replicated.

G<sub>2</sub> Phase: Preparing for cell division

In the G<sub>2</sub> phase, many of the organelles and molecules required for cell division are produced.

M phase: cell division

mitosis (division of the cell's nucleus)  
cytokinesis (division of the cytoplasm)

